Attorney Docket No. 52719.00017

REMARKS

Claims 1 - 50 were pending in the instant application when last examined. Claims 1 - 50 were rejected. Claims 1, 10, 20, 28, 46, 48 – 50 are being amended herein for clarity. Claims 9, 18 – 19 and 36 – 45 are cancelled. No new matter is being added and claims 1 – 8, 10 – 17, 20 – 35 and 46 - 50 are pending in the instant application. Reconsideration and allowance are respectfully requested.

Rejection under 35 U.S.C. § 102(b) over
Kingberg

On pages 2 through 14, the Office Action rejected Claims 1 – 4, 7 – 8, 10 – 13, 16 – 23, 26 – 31, 34 – 35 and 45 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,734,887 to Kingberg et al. ("Kingberg"). Applicant respectfully traverses.

In item 3 on page 4, the office action argues that:

> converting said logical model into a first derived subject model (Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. In the specification Page 10, paragraph 1, the applicants state "derive subject model 301 comprises plurality of relationships between a plurality of groups information entities in database". Kingberg discloses converting said logical model into a first derived subject model as shown in column 6, lines 44 — 54...[quote omitted for brevity]

Claim 1 as amended recites:

> 1.   A method for managing information, comprising:
> modeling a first plurality of information entities, including a first entity and a second
>   entity, using a first logical model;
> converting said logical model into a first concept centric subject model (derived subject
>   model);
> converting said first derived subject model into a first physical model; and
> mapping at least one relationship between said first entity and said second entity of said

Attorney Docket No. 52719.00017

first plurality of information entities based upon said first physical model.

Even if arguendo, the office action's assertion is correct in broadly interpreting the claims such that a logical model may correspond to Kingberg's Logical Data Access Layer, by Kingberg's own admission, Kingberg does not provide a derived subject model:

> The Logical Data Access Layer determines which of the physical tables and
> associated columns are required to satisfy the Application request and then builds one or
> more database query statements containing the appropriate physical table and column
> names. (Kingberg, Abstract)

Kingberg makes clear that Kingberg does not, however, teach, suggest or otherwise render obvious providing a derived subject model, as stated in the example of the instant specification. The derived subject model, by contrast, may provide an organization and relationships of information stored in the physical database. Instead, Kingberg merely provides a physical mapping of user terms for database tables and columns to actual locations in the physical database. As stated in Kingberg in their claim eight (8):

> 8.   A method of accessing data in a relational database comprising:
> receiving a logical data request that specifies logical entity types and logical entity type
>   attribute in accordance with a logical data model;
> parsing said logical request to obtain one or more logical entity type and logical attribute
>   tuples;
> mapping each logical entity type and logical attribute tuple to a physical table and a
>   physical table column;
> obtaining the join criteria for each logical entity type represented by more then one
>   physical tables, the join criteria associated with the logical entity type specifying
>   how to join the physical tables representing the logical entity type to form the
>   logical entity type table;
> building one or more dynamic SQL statements in accordance with the logical data
>   request that may be executed against the physical tables in the relational database.
>   (Kingberg, claim 8) [emphasis added]

Kingberg's mapping directly to physical table and physical columns in the database does not provide grouping relationships facilitating concept centric processing. Even if in one embodiment the first model links to the user view to the database as argued by the office action, Kingberg fails to disclose a derived subject model that provides modeling data and a concept centric model that enables concept centric processing.

Concept centric organization and relationships enable providing concept centric processing of data stored in a physical database. Claims 1, 10, 20, 28, 46, 48 – 50 are being amended herein in order to clarify that it is a concept centric derived subject model that is intended. Specific support may be found in the specification on page 10 lines 4 through 14. Various embodiments further enable different concept centric processing, and based upon different concepts, to be more effectively conducted. It is already determined that these types of processing or more suited to the target for these relationships. As noted in the specification with reference to an example using customer information:

> Accordingly, the derived subject model 301 comprises a customer entity 302. Static attributes are represented by a customer demographics entity 303, which comprises demographics information for each customer in customer entity 302, and a customer geographic entity 304, which comprises geographical information about each customer in customer entity 302. A purchase transaction entity 305 comprises merchant purchase transaction data, such as a time, a date, an amount, a description, and so forth, for a plurality of purchase transactions entered into by customers in customer entity 302. A return transaction entity 306 comprises merchant return transaction data, such as a time, a date, and a returning item, and so forth, for a plurality of return transactions entered into by customers in customer entity 302. (Specification, page 10, lines 4 – 14).

Thus, the user may create a customized application merely by applying a user's concept of interest to the concept centric model. Instead, Kingberg requires an application to use the Logical Entity Types and a logical entity type attributes from the logical data model in the specification of the data in the database: "The application specifies the data it desires using logical tables and logical table attributes." (Kingberg, col. 10, lines 44 - 46).

Attorney Docket No. 52719.00017

In fact, in one embodiment, a computer may derive the subject model. Further, the computer may derive the logical model (Specification, Fig 11E). Either one or both models may be derived by the computer.

Rejection under 35 U.S.C. § 103(a) over
Kingberg in view of OLAP Council and Kingberg in view of Fink

In item 6 on pages 14 – 15, the Office Action rejected claims 5, 14, 24 and 32 under 35 U.S.C. § 103(a) as being unpatentable over Kingberg in view of "The OLAP COUNCIL, OLAP and OLAP Server Definitions," published by the OLAP Council, Copyright 1995. ("OLAP Council Publication").

In item 6 on pages 15 – 16, the Office Action rejected claims 6, 9, 15, 25, 33, 36-38, and 40-44 under 35 U.S.C. § 103(a) as being unpatentable over Kingberg in view of U.S. Patent No. 6,490,590 to Ronald Fink ("Fink"). Applicant respectfully traverses.

While rendered moot by amendments made to the claims herein, neither Fink nor OLAP Counsel can remedy the shortcomings of Kingberg in failing to teach, suggest or otherwise render obvious a derived subject model that provides concept centric processing.

Attorney Docket No. 52719.00017

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Respectfully submitted,

Dated: <u>September 23, 2004</u>

By _____

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09/827,969   Page 15 of 15

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